AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A ceramic heater for heating a semiconductor wafer, comprising

a heating element on one of the two opposing surfaces of the ceramic substrate or inside the ceramic substrate, wherein a heating element is arranged on a surface of a ceramic substrate in a disc form or inside the ceramic substrate in a disc form, the thickness of said ceramic substrate being over 1.5mm, the diameter of which being 200 mm or more, and the surface roughness Rmax of the side face of said ceramic substrate being is from 0.1 to 200 μm according to JIS B 0601.

Claim 2 (Currently Amended): The ceramic heater for heating a semiconductor-wafer according to claim 1, wherein said surface roughness Rmax is from 0.5 to 200 μ m according to JIS B 0601.

Claim 3 (Currently Amended): The ceramic heater for heating a semiconductor wafer according to claim 1 or 2, wherein said ceramic substrate is fitted into a supporting case.

Claim 4 (Currently Amended): The ceramic heater for heating a semiconductor wafer according to any of claims claim 1 to 3, wherein said ceramic substrate is made of a nitride ceramic.

Claim 5 (Currently Amended): The ceramic heater for heating a semiconductor wafer according to any of claims claim 1 to 3, wherein said ceramic substrate is made of a carbide ceramic or an oxide ceramic.

Claims 6-7 (Canceled)

Claim 8 (New): The ceramic heater according to claim 1, wherein the thickness of said ceramic substrate is over 1.5 mm.

Claim 9 (New): The ceramic heater according to claim 1, wherein said ceramic substrate is produced by sintering ceramic powders.

Claim 10 (New): The ceramic heater according to claim 1, further comprising a temperature-measuring element.

Claim 11 (New): The ceramic heater according to claim 1, wherein said ceramic substrate comprises a sintering aid.

Claim 12 (New): The ceramic heater according to claim 1, wherein said heating element comprises two or more circuits.